

Remarks

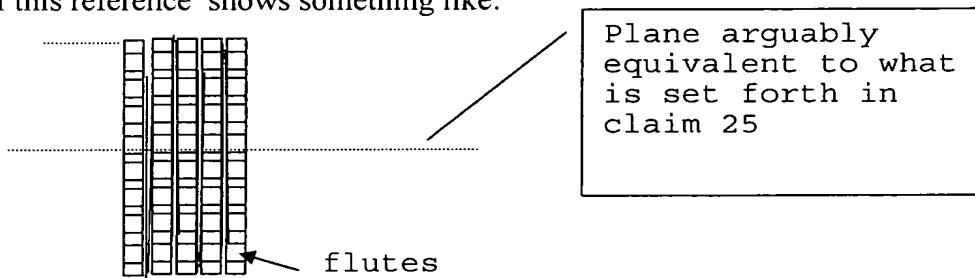
The examiner's reconsideration of the application is requested in view of the various amendments above and comments which follow.

Taking the matters raised by the examiner in turn, the above amendments deal with the matters raised by the examiner in numbered sections 3 through 27 of the office action. It is therefore submitted that the claims meet the requirements of 35 U.S.C. §112.

One of the primary issues raised by the examiner is that the examiner cannot see how the corrugated core strips can have flutes with corrugated or trapezoidal cross-sections. To avoid this problem, the attached claims do not deal with corrugated strips, but simply recite strips and the cross-sections of the strips are appropriately defined.

The main substantive argument of the Examiner relates to the rejection of claims 25, 28 - 31 and 34 - 37 under 35 U.S.C. §102 as anticipated by US 5,132,156 (Trassare). Below is illustrated how the flutes are related to the plane mentioned in claim 25.

Fig. 5 of this reference shows something like:



The flutes can be seen in Fig. 2 of Trassare. The hexagonal honeycombs can be seen in the cut-away portions of the figure on the right. The flutes are therefore perpendicular to the plane of the sheet itself. However, as shown in the above figure this packing has the flutes parallel to the plane of the composite which is the one mentioned in claim 25 whereas the flutes are perpendicular to this plane in the invention (see for example Fig. 6 of the application). This difference has now been added to the independent claims to make it clear what the difference is.

For the claims relating to the method or system, the flutes start out parallel to the plane and are then rotated so that they are perpendicular to the plane (compare Fig. 3 with Fig. 6). This has also been clarified.

The Examiner does not refer to the reference numbers of Trassare and this would be useful as we are dealing with 3D forms of some complexity. The applicants understand the Examiner's argument to apply to Fig. 5 of Trassare as this is the only figure in which anything is arranged at 180°. Note there is no evidence that the cover layers are folded but appear joined. Also this is the figure with the cover layers of the core strips being arranged parallel to one another and transversely with respect to the one plane. This defines the plane as being perpendicular to each core sheet. The honeycomb form can be clearly seen in Fig. 2 and the hexagonal open rings of the honeycomb have an axis perpendicular to the plane of each core sheet. Thus when several sheets are stacked together as in Fig. 5 with a cover layer connection therebetween, the axis of the honeycomb rings, which is the same direction as the direction of the flutes of the present invention, is parallel to the plane formed by the stack of sheets. (*The figure shown above might help to explain this*). However, the present invention as claimed requires the flutes to be perpendicular to each strip and perpendicular to the plane of the final composite while at the same time the cover layers of the core strips are arranged parallel to one another and transversely with respect to the one plane as well as being folded through 180°. The flutes being perpendicular to each strip is shown in Figs. 3 to 6 of the present application. The feature that the flutes are perpendicular to the final product is shown in Fig. 6 and Fig. 10. As shown in Fig. 10 the final product is in the form of a plane in which the flutes (which form the tubular part of the honeycomb) are perpendicular to the plane of the product formed by folding. In Trassare this is not the case in the product of Fig. 5. Here the flutes or open parts of the honeycomb rings are parallel to the plane of the product formed.

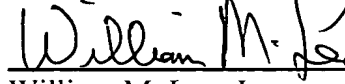
Hence, Trassare does not anticipate the amended claims. Further, would not have been obvious how to create complex three-dimensional products merely by folding. Thus it would not have been obvious how to create by folding the structure, as now claimed, based on Trassare.

Given the above, it is submitted that the claims, as amended, distinguish from and are allowable over the prior art. The examiner's further and favorable reconsideration is therefore urged.

As this response is being sent at the end of the six month period for response, an appropriate petition for a three month extension of time is also submitted herewith.

August 13, 2003

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William M. Lee, Jr.", written over a horizontal line.

William M. Lee, Jr.

Registration No. 26,935

Barnes & Thornburg

P.O. Box 2786

Chicago, Illinois 60690-2786

(312) 368-6620

(312) 368-0034 (fax)